

TITLE OF THE INVENTION
A SEMICONDUCTOR DEVICE AND
A METHOD OF PRODUCING THE SAME
ABSTRACT OF THE DISCLOSURE

5 In an integrated pressure sensor including a semiconductor substrate having a p type single crystal silicon substrate and an n type epitaxial layer of which a portion is etched by electrochemical etching to have a diaphragm, an impurity diffusion layer piercing the n type epitaxial layer at least defining the diaphragm is formed
10 for isolation. An etching wire is formed on the surface of the n type epitaxial layer with insulation and the first end of the etching wire extends to the inside of the surface and connected to the n type epitaxial layer. The second opposite end extends to an edge of the semiconductor substrate. The etching wire does not cross the
15 impurity layer inside the surface of the semiconductor substrate to prevent the etching wire from short-circuiting with the impurity diffusion layer during the electrochemical etching.